

C⁴
d) allowing said embryo to develop to term; and

e) identifying a transgenic aquatic organism whose genome comprises a disruption of an endogenous GDF-8 gene, wherein said disruption results in said aquatic organism exhibiting increased muscle mass as compared to a wild-type aquatic organism.

C⁵
13. (Amended) The method of claim 7, wherein the transgene comprises a GDF-8 antisense polynucleotide, which interferes with expression of GDF-8.

Please add the following new claims:

C⁶
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64. A transgenic non-human aquatic organism whose genome comprises an inserted transgene encoding a molecule that interferes with expression of endogenous growth differentiation factor-8 (GDF-8), wherein the molecule is a dominant negative GDF-8 polypeptide or an antisense nucleotide sequence, a ribozyme, or a triplexing agent, which is complementary a polynucleotide encoding GDF-8, and whereby expression of the transgene reduces GDF-8 levels in the transgenic aquatic organism, thereby resulting in the transgenic organism exhibiting increased muscle mass as compared to wild-type organism.

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65. The transgenic aquatic organism of claim 64, wherein the aquatic organism is a crustacean, a mollusk, a chordate, a gastropod, a pelecypod, a cephalopod, or an echinoderm.

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66. The transgenic aquatic organism of claim 64, wherein the aquatic organism is a piscine or an amphibian.

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67. The transgenic aquatic organism of claim 64, wherein the transgene encodes an antisense nucleotide sequence, a ribozyme, or a triplexing agent, which is complementary a polynucleotide encoding GDF-8.

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68. Fish meat produced by the transgenic aquatic organism of claim 64.--